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Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE

C. VAN ALEN ANDERSON, M.D.,

PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

PART I.

PRELIMINARY REMARKS.—ATELECTASIS.

In studying the diseases of the infantile respiratory apparatus, it is necessary that we should call to mind the peculiarities of structure and constitution of the child immediately after birth, and during the first years of extra-uterine life. We shall find ourselves observing the system in a state of active development, every part growing, every part strengthening its function by continual exercise. New stimuli are constantly applied. Unused organs are called upon not only to supply their hitherto untried powers to the nourishment of the animated being, but to harmonize with others, as recently created, and as strangely circumstanced as themselves. The complex machine which has been formed atom by atom, part by part, in darkness and seclusion, is suddenly put in motion by the great hand of nature, and required to perfect its own structure by its own processes of increase and decay. Probably there is no creature in the world more comfortable than a fœtus in utero at the conclusion of his nine months of preliminary existence. His organs are formed and prepared for his entrance into the outside world; his alimentary canal is in good working order; his muscular system has acquired sufficient strength for the automatic movements of his limbs; his lungs are carefully packed away in his thorax, ready to respond to the influence of the air; and he is surrounded and protected by soft membranes and a bland fluid of an equable temperature.

That the change from this condition to that one which is commonly known as "life" is anything but pleasant, he evidences by his cries at the moment of his birth. His unconscious repose, solitude, and darkness are rudely taken from him. He is pushed head-foremost into a world of unaccustomed light and unusual excitement. He exchanges his warm and bland fluid for a new and colder element, and his delicate skin experiences harder pressure and rougher usage than it has before known. His nourishment is henceforth to be accomplished by his own efforts; each sense is to be awakened and educated; his circulation takes a different course; and the function of respiration is now for the first time performed. The newly born child differs in many anatomical particulars from the adult. He is not yet a perfected being, but his development is to be continued during the important periods of childhood and youth; he is to adapt himself by constant change to the constant changes that go on about him. At birth the tissues, generally, are soft, and contain a large quantity of fluid; the skin is exceedingly sensitive, and forms in fact a portion of the respiratory apparatus; the glandular, lymphatic, and capillary systems predominate; there is very great nervous excitability, and as nutrition is to be carried on immediately the alimentary canal is more perfectly arranged than any other part of the body. The infant weighs about six pounds, and is eighteen or nineteen inches in length; the lower extremities are smaller in proportion than the upper ones; the head and abdomen are large; the thorax is prominent in front, flattened at the sides, and comparatively small. The mouth, though unfurnished with teeth, is admirably adapted for the procurement and conveyance of food; the stomach is a kind of elongated sac, its greater curvature not yet produced; the liver is large, and occupies about one-third of the abdominal cavity; the spleen is small; the lacteals as well as the pancreas, the kidneys, and supra-renal capsules, are well sized, and the mucous membrane of the intestine is villous, vascular, and readily irritated by the introduction of improper food. The special senses of sight and hearing are dull and imperfect, the movements of the limbs are automatic, and the reflex nervous system is in especial activity. But that which concerns us most at present is the condition of the organs which carry on aeration of the blood. Before birth they have not, of course, been exercised, as the circulation of the placenta performed their office; when, however, the infant is separated from the mother they are called into immediate play. A very beautiful explanation of the manner in which this is done has been offered by Dr. Ramsbotham: "Dissection teaches us that the cutaneous nerves communicate most freely with each other, and that a large extent of skin is supplied from the same source as the diaphragm, the chief power employed in respiration. The *phrenic, or internal respiratory nerve*, is derived from the second, third, and fourth cervical; and large branches from the second and third supply the back part of the head, the jaw, neck, shoulders, arm, and the upper part of the back and chest. Thus, then, the diaphragm, and the integuments of the upper part of the body—parts remote in situation—are connected together by the direct sympathy of nervous communication; and it would be an inevitable consequence that any stimulation applied to the extremities of one set of branches supplying the skin, would be propagated to the other branches of the same nerve ramifying on the diaphragm. The consequence of that stimulation would be the contraction of that muscle; by that contraction its convexity towards the thorax would be destroyed; it would be drawn into the form of an inclined plane, the capacity of the chest would be increased, and the external air would rush through the trachea into the pulmonary cells to fill the void thus created." The sensitiveness of the infant's nervous system is therefore its safeguard. The stimulus of the colder atmosphere into which it is ushered encountering the delicate filaments of the cutaneous nerves provokes the first, long, deep inspiration which is required to expand its lungs. Respiration is, however, very imperfectly performed for some time after birth. The lungs have been packed closely away in the thorax ever since their production, and the pulmonary vesicles do not at once acquire their full expansion. The softness and delicacy of the skin, and the completeness of the capillary system, still compensate to a very great extent for the deficiency of the pulmonary circulation. But gradually as the child breathes more and more, and takes, in sucking and in crying, deeper and deeper respirations, the pulmonary tissue gives way, and finally fills up its appointed portion of the thoracic cavity. Yet all the peculiarities of the respiratory apparatus are not confined to the lungs.

The nose is small, and the nostrils do not afford as free a passage for the air as they subsequently do. At the same time the nose is an organ of extreme importance to the infant, for, during the child's application to the mother's breast, the air passes entirely through the nasal passages to the lungs while the mouth is employed in suction. The larynx is also deficient in size during the first six or eight months, and does not increase markedly until the child begins to talk. The ribs, though the most of all the bones—with the exception of those of the skull—advanced in ossification, are soft, yielding, and elastic, while the intercostal and other muscles of respiration are feeble and meagre. The respiratory apparatus during infancy and childhood has, as it were, double work to do: it has to grow itself during the advancing periods of juvenile life, and it has to respond to the calls made upon it by the rapid circulation in all parts of the body; for the organs of vegetative life have not only to provide for the daily waste of the daily renovation, but also for the daily increase. The blood, therefore, flows with greater celerity, and requires more

frequent vivification than in the adult. Calling the average frequency of the pulse in the grown person seventy-five in a minute, and his respiration twelve, we shall find in the child of a week old that the former is 102 and the latter thirty-nine. The rapid breathing of the infant is not performed in the same manner as in later life. If you recall what has been told you, you will remember that in older persons the motion of the thoracic walls and of the diaphragm are the means by which the air is drawn into and expelled from the chest. While the diaphragm descends in inspiration the scaleni muscles contract and fix the first rib, and then the intercostals, acting upon the rest, draw them upwards and rotate their extremities outwards. When the chest is so expanded by the motion of the diaphragm and the ribs, the air enters through the larynx and trachea, and dilates the lungs. In this performance, however, more is done than the mere expansion of the chest. A considerable amount of muscular force is required for this simple operation, on account of the resistance afforded by the elastic nature of the walls of the chest themselves; and when this is overcome we have still to conquer the opposition of the yellow elastic tissue which permeates every portion of the lungs, contracting upon the bronchial tubes and air vesicles. Independently, however, of this last resisting force contained in the pulmonary tissue, at each ordinary inspiration we exert a muscular force equivalent to raising a hundred pounds. Now, you will perceive that in the tender, delicate infant this power does not exist. The resistance is proportionally the same in the child as in the grown person, but the muscles which are to overcome it have not acquired the same volume and consistency and hardness. Its breathing, therefore, is almost difficult; it is quick and short, hurried and shallow in its character, interrupted every few seconds by a pause as if for rest; while the slightest excitement or most minute disturbance will quicken it by ten or twelve inspirations in the minute. The child does not exhale as much carbonic acid as the adult, and it has even been observed that as the number of respirations increases the quantity of the gas in each diminishes, presenting a proof of the feebleness and uncertainty of the infantile vital processes. The manner of this breathing, too, is peculiar in another respect: it is performed almost altogether by the abdomen, the thorax expanding very slightly during the first few months of life. "The inspiration is affected almost entirely by the diaphragm, which being highly arched in expiration becomes flatter as it contracts, and descending presses on the abdominal viscera, and pushes forward the front walls of the abdomen. The movement of the abdominal walls being here more manifest than that of any other part, it is usual to call this the *abdominal mode* or *type* of respiration." (Kirke's and Paget's Phys.) If you put your ear to the chest of very young children, you will consequently hear little of that clear, loud sound which is known as puerile respiration; but as the child increases in age, and its muscular system in strength, the abdominal respiration disappears, is replaced by the thoracic, the lungs expand, and the auscultatory sounds become distinct. You will, therefore, observe, gentlemen, that the peculiarities of the infantile respiration are these:—1st. That the lungs at the period of birth are, for the first time, called into action, and do not at once and in all parts assume their full expansion. Also, that the first inspiration is caused by the stimulus of cold applied to the extremities of the cutaneous nerves, and through the reflex system inducing contraction of the diaphragm. 2d. That the mechanical portion of the respiratory apparatus is feeble, that the muscles are weak and undeveloped, and that the ribs on which they act are soft and yielding, not affording the same opportunity for firm traction that they do in after life. 3d. That, in consequence of this imperfection of the bony and muscular elements of the thorax, inspiration and expiration in very young children are chiefly performed by the contraction and relaxation of the diaphragm; that their breathing is, in fact, abdominal, but that as the child grows older the respiration changes its type, and becomes thoracic. 4th. That in consequence of the defective dilatation of the chest auscultatory sounds are fainter at the time of birth than they afterwards become; for they increase in tone and clearness with age, until they assume that state known as "puerile respiration." 5th. That the respiration of the young infant is hurried, shallow, difficult, and accelerated not only by disease but by slight excitements.—I have given you a brief view of the normal condition of the organs by which the blood is renovated in childhood. This much was necessary for the proper understanding of the subject which we are studying; for, if we are not familiar with a given part in health, we are unable to understand the changes and transformations wrought in it by disease. To be acquainted with morbid structures we must know their opposites; it is impossible for us to become good pathologists without previously being good anatomists and physiologists. This fact will, I think, be brought especially to your notice in entering upon the consideration of the state of the lungs to which I am about to ask your attention. It is one in which certain post-mortem appearances were long considered as the result of disease, until a happy inquiry into the physiology of the lungs showed that these appearances were simply the result of the non-fulfilment of their duties by the pulmonary tubes and vesicles. Physicians were formerly much puzzled by observing in the lungs of children who died soon after birth, lesions which seemed to indicate the possibility of pneumonia affecting the fœtus, but at the same time leaving behind it phenomena entirely different from those caused by the same disease in the adult. It received the name of *lobular pneumonia*, as pointing to its characteristic peculiarity; the malady seemed to be confined to single lobules, which were found of a dark color, dense, non-crepitant, sinking readily in water, and when cut not displaying that oozing of frothy serum which comes from the freshly divided surface of a healthy lung. These portions felt rather harder than other parts, and were not as easily torn. If an incision were made through them, they closely resembled in their compactness and solidity muscular tissue, and they were therefore said to be *carnified*. These lobules were strictly defined and mapped by their respective boundaries; there was a sharp line where the diseased line terminated abruptly, and met the healthy pulmonary structure; while they were depressed, giving to the surface of the lung an uneven feel. It was therefore manifest that the supposed inflammation did not spread by continuity, for there was no gradual shading off from the darker to the lighter parts, but, on the contrary, the deep violet hue was spread evenly over the whole lobule, and contrasted strongly with the unaltered lung substance around it. Much perplexity was excited by such phenomena as these, especially as it was discovered that they were not in all cases congenital, that this condition might be acquired after birth, and that the ordinary treatment for pneumonia was not adapted to cure it, but rather to hasten the fatal result. It was reserved for a German physician to give the true explanation, which he did in 1832. He had the temerity not to believe all that was in the books: he was bold enough to use his own senses. Instead of wondering, scalpel in hand, how in the world the fœtus got pneumonia, and why it was confined to lobules, and was not lobar, he had the audacity to try an experiment which nobody had thought of before him. Gentlemen, he inflated the lungs, and in one breath expanded the violet colored patches, and blew away all received theories of lobular pneumonia. Dr. Jörg gave the first precise account of this fœtal condition of the lungs, showing plainly that what had before been regarded as inter-uterine disease was in fact no disease at all, but really a failure to establish respiration, leaving portions of the pulmonary tissue in an undilated state. You will easily perceive that the smallness of the power in the muscular system in young children affords an easy explana-

tion of the way in which this happens. You are aware that in the adult the pressure of the atmosphere upon the outside of the chest is balanced by the pressure of the air which is continually introduced into the interior; but when an infant draws its first breath it has to overcome not only the resistance of the thoracic walls, and the anatomical elements of the lungs, but in addition to all this it is forced to raise to some extent the weight of the atmosphere resting on the outside of its body. Now, the respiratory muscles are frequently not strong enough to do this. They are very little fellows in a feeble child—they have rather a poor foothold on the yielding ribs—and though they may and do pull hard, they are unable to move the enormous load as they should. The thorax is not expanded at all, no air enters the lungs, and the infant is still-born; or else respiration is only partially established, and the lungs remain in the condition known since the time of Dr. Jörg as *atelectasis*. This state of affairs is not, however, confined to newly born children; it may come on even in the adult in the course of other diseases. We may, therefore, properly enough make a distinction between the two, calling the first *atelectasis*, or the condition of those portions of the lungs which have never received any air at all into their vesicles, and are consequently unexpanded; and speaking of the second as *collapsed* lung, or that state which the pulmonary tissue assumes when having been once dilated by, it becomes completely emptied of the air.

Original Communications.

ON THE USES OF OPIUM,

IN MANAGING THE SHOCK AND REACTION OF SURGICAL INJURIES.

By EDMUND S. F. ARNOLD, M.D.,

OF YONKERS, N. Y.

When a serious injury occurs to any part of the body, calculated to destroy or materially to impair the vital functions of the part, the whole system sympathizes, and a general depression of the vital powers, proportionate to the seriousness of the mischief, takes place. The organic nervous system becomes temporarily paralysed, and with it all the vital functions dependent upon its healthy influence; the surface becomes pale and clammy, the circulation fails, nervous sensibility is destroyed, the whole system, in fact, is prostrated and relaxed, and the sufferer, if not in a state of actual syncope, is nevertheless frequently unconscious, as far as sensation is concerned, that any actual injury has befallen him. These symptoms, of greater or less duration, may be modified, increased, or prolonged, by mental shock or loss of blood.

Should the patient survive the first shock of the injury, after a while, either owing to the natural elasticity of the vital forces, or from restorative measures judiciously employed, returning circulation and sensibility indicate the commencement of reaction. The beat of the heart, at first weak and irregular, becomes more wild and tumultuous, meeting as it does with unwonted resistance in its attempt to propel the blood through the obstructed capillaries; the nervous sensibility becomes restored, and, gradually increasing, oversteps all healthy bounds, and with it the sufferer experiences a sense of stiffness and pain, soon amounting to agony, perhaps, in the injured part; and if all this goes on unchecked, an exalted action takes place proportionate to the extent of the previous depression, and local and general irritation and fever place the patient's life in more imminent jeopardy than at first. All equilibrium is destroyed, and the already shattered vital powers readily succumb.

I now come to the important question—How should this state of things be met? Can we lay down any fixed and simple plan of treatment, by acting on which present dangers may be overcome, and those ahead be averted? or must we of necessity follow developments and be controlled by a variety of circumstances requiring vast experience to enable us to weigh them correctly, or to guide us successfully through the often appalling difficulties to be encountered?

Were we, when the nose or ears of an individual are frozen, to take the sufferer into a warm room, and there await reaction before commencing our treatment, the reaction would probably be so sudden and violent that it would make headway calculated to cause destruction or at least permanent injury to the part before we could control it. Experience, on the other hand, has taught us to use friction with snow or ice-water until the vitality of the part is restored, thus keeping down by the cold any sudden reaction; while by friction return to the normal condition is brought about so gradually that it shall not run beyond healthy bounds, and the danger is soon overcome. This affords us the principle by which we ought to be guided when the whole system is stricken down by the shock of a sudden injury. During the continuance of this the whole nervous system is oppressed, and I think it should be laid down as a leading principle that, simultaneously with measures promotive of reaction, such oppression should be removed only by very slow degrees, and thus by allowing the system to gradually recover its natural elasticity, all danger may be frequently averted in a few days. This must be accomplished by a combination of stimulating and sedative influences, so balanced as on the one hand not to unduly hasten restoration, on the other not to risk utterly prostrating the as yet feeble vital forces. Such a combination I believe we possess in Opium.

So many apparently opposite qualities have been claimed for this drug that I may be pardoned for dwelling upon such of them as are applicable to my purpose. Opium, says Stillé, is a very complex substance containing both sedative and stimulant principles, the former residing mainly in the morphia, the latter probably in the thebaina of which it contains one per cent., and which, according to Magendie, is closely analogous to strychnia and brucia in its action upon the system. Codeia is also said to be a nervous stimulant, but this is not so well established.

Mr. Frederick Skey, of Bartholomew's Hospital, remarks that, while opium as a sedative is in daily requisition, its action is so associated with this that its occasional influence as a stimulant is almost lost sight of. Further on he says, that opium is a most valuable stimulant of the vital powers; that there is no drug, simple or composite, known to our pharmacologists that possesses an equal power with opium of giving energy to the capillary arteries, of promoting animal warmth, and thus maintaining an equable balance of the circulation throughout the body. We all know that when opium has been administered in small doses, and frequently repeated for any length of time, a hot skin and full pulse and a state of excitement bordering on delirium may be produced. How then is opium an antiphlogistic?

Here Mr. Skey again observes that its benefit, when administered for the purpose of arresting inflammatory action of the vessels, admits of much doubt; but he insists strongly on its inestimable value when resorted to immediately after an attack of inflammation has been subdued by local or general bleeding. Elliotson, Christison, and Watson, all extol it highly as an antiphlogistic in acute inflammatory disorders, but only after free bleeding; while Prof. Lever, of Guys, and others, affirm its value in restoring the system after prostrating uterine hæmorrhage. From all this we gather that opium does not really subdue inflammation. It must, where it exists, be subdued by other means, and the opium then exhibited as a preventive against its recurrence. In its virtue, then, as a preventive, not as a subduer of inflammation, lies the peculiar advantage of administering it freely immediately after the performance of any of the great operations of surgery, and keeping the patient under its influence until the danger of inflammation

arising is past. It then both rouses the energies of the prostrated system, restores and controls the circulation, soothes pain, allays irritation, and thus places the patient in the best possible condition for recovery as well as for the exertion of the necessary separative processes. We may reasonably infer also, if opium acts so beneficially in restoring the energies and preventing subsequent inflammation when the system is prostrated by syncope from venesection or severe hæmorrhage, that it would do so equally in promoting healthy reaction after severe injuries, especially if the latter have been accompanied by hæmorrhage. I should further arrive at the conclusion that the foregoing shows a certain reduced and debilitated or exsanguine condition to be necessary for the safe administration of the drug in full doses, and that in proportion as reaction or inflammation have actually advanced we shall, bearing in mind its stimulant properties, need to be more careful of its dangerous effects being developed in the form of congestion or even narcotism.

The above conclusions presuppose the use of opium itself, and consequently of its stimulant and sedative properties combined. Of the latter I have not yet spoken. Repeated small doses, Elliotson says, create heat, thirst, and fever, whereas a considerable quantity produces the reverse; hence, if you want its sedative effects, it should be given in one full dose. This, he adds, would not be safe unless the patient were copiously depleted in the first instance, in other words until by the debilitated or exhausted or exsanguine condition of the patient, a toleration had been created for the remedy not afforded by the system when in a more vigorous state. Always bearing this in mind it seems then that we can produce either a stimulating or sedative effect according to the smaller or larger doses in which we employ it, the stimulating effect predominating where small doses are given; on the other hand, where a large dose is administered, we seem to step away over the stimulating stage, and produce an almost direct sedative action. *A priori*, with so powerful an agent one might suppose that with prostrated energies the system would be less able to resist its influence, and more readily succumb; whereas we find the reverse the case, and I do not know how it can be otherwise explained than by supposing that the narcotism arises from nervous exhaustion and congestion resulting from over-stimulation, and that the tolerance of the remedy is increased proportionally as the stimulation may be needed, and the system reduced to a condition removed from the dangers of congestion. In the case of a lady I attended during the cholera season of 1849, for dysentery, complicated with chronic disease of liver and lungs too, it was determined after consultation to try opium in large doses, and six grains were given every six hours for nearly three weeks, and until over four hundred grains were taken without producing a single unpleasant symptom; indeed it appeared to keep her in an artificially normal condition for the first fortnight, after which she gradually sank. There were no hopes entertained of the recovery from the first, and she was in an extremely exhausted condition when this treatment was commenced. I select the case of this poor broken-down creature in preference to others terminating more favorably, showing as it does, first, the reviving, and secondly the sustaining powers of opium; and I also think, from all the evidence I have thus far adduced as to its action, that if not placed in a position by itself as a compound substance in the Materia Medica, it nevertheless belongs rather to the class of nervous stimulants and tonics than among the narcotics, and that when we so regard it we take the first steps towards appreciating its great value in desperate surgical injuries, as well as the conditions under which we can safely employ it:

There is a class of cases where, perhaps, the pain is so great and overwhelming that the progress of reaction becomes, as it were, arrested, and what little of vital energy remains becomes quickly exhausted, and the patient will sink; or the case may otherwise terminate fatally from the irritative fever that sooner or later sets in. Here we can avail ourselves of the modifying influence of opium upon pain. If either by bloodletting, by the exhausting nature of the injury itself, or by the accompanying pain, the nervous energy has been reduced to a point at which a full tolerance of the drug is established, then taking the alleviation of pain as our guide, I believe it may be administered to any extent necessary to effect that object, with the effect not only of calming and soothing but also of preventing inflammation, and thereby contributing to the recovery of the patient.

In a case attended by Dr. Robert Nelson many years ago, in Canada, a gentleman had been wounded in a duel. The ball struck the posterior third of the crest of the right ilium, fractured that bone, and entered the body of the last lumbar vertebra, where it was found some eighteen years after. On the third night the agony of the patient was such as the Doctor had never before seen, nor since; the bedstead trembled with his body; he breathed and spoke through his teeth, and perspired so as to wet through a hair mattress. He exhorted for relief of any kind, even called for death. To this patient, at eight P.M., forty drops of tr. opium were given; at nine P.M., ℥ ij.; at three-quarters after nine P.M., ℥ iij; at half-past ten P.M., ℥ j.; at twelve P.M., ℥ ss.; and between three and four A.M., ℥ ss.; in all, ℥ xxiss.; when relief was obtained. I should add, he had been previously very freely bled. This large quantity of laudanum was taken with impunity and benefit. He subsequently took ℥ ss. doses two or three times in the twenty-four hours, producing and leaving behind no other symptoms than those of a moderate anodyne in ordinary cases of sickness, gradually improved, and recovered. In the above case, of which only a short abstract is here given, we have the conditions necessary to establish a full tolerance of opium, viz. a system reduced by copious bleeding, and shattered by the severe and exhausting pain of a terrible injury, involving both sensitive and ganglionic nerves. We find that it was necessary to repeat the opiate in full doses, in order to keep the pain subdued, and such will mostly be necessary; but instances will sometimes occur where the pain, being once effectually subdued by opium, will not return, although the lesion that caused it remains. Before the soothing effect of the drug has worn off the system appears to have become reconciled to the injury. May we not infer from such cases as the above, that when by shock, or hæmorrhage, or venesection, the necessary tolerance of opium has been established, that we may take the alleviation of pain as a safe guide for the extent to which it may be administered, giving it to any amount necessary to relieve pain, and no more—the cessation of the latter being evidence that the system has been thoroughly brought under its sedative influence?

(To be Continued.)

CASE OF EXSECTION OF SHOULDER-JOINT.

REMOVAL OF THREE INCHES OF SHAFT WITH EXCELLENT RESULT.

By JOHN WILSON, M.D.,

SURGEON U.S. VOLS.

James K. Clark, Co. F, 10th Pa. Res., æt. 20, was wounded at the battle of Fredericksburg, Dec. 13th, 1862. The ball (character unknown) entering about four inches below the acromion process of the right side, through the inner edge of the deltoid muscle, and passing upwards, comminuted a portion of the shaft and the head of the humerus badly. When admitted into hospital, the patient stated that several unsuccessful efforts had been made by surgeons on the field to discover and remove the ball; but no attempt had been made to save the limb.

After sufficient time had been allowed the man to recover from the exhaustion consequent upon his removal from the field-hospital in ambulance, the operation of exsection of the head and shattered portion of the shaft was determined upon. At this date, Jan. 6th, the arm was much swollen, a fetid and sanious discharge flowed freely

from the wound; patient had considerable thirst, hot skin, coated tongue, and pulse of about 100. His previously good physique, however, as well as his cheerful fortitude under his suffering, indicated him a proper subject for the operation. He was accordingly on the above date placed upon the table, the ordinary anæsthesia produced, and a U-shaped incision made, embracing the deltoid, the inner arm of which was slightly modified, so as to take in its course the external wound. The flap was then dissected up, and the head of the bone turned out of the socket (care being taken not to cut the tendons of the biceps or coraco-brachialis), and the operation completed by removing with the chain saw about three inches of the upper portion of the shaft. Search was then made for the ball, when it was discovered that it had grazed the edge of the glenoid cavity without fracturing it, and had passed beneath the scapula beyond the reach of the ordinary means of extraction. The wound was closed with sutures, and the patient immediately removed to his bed. As soon as he had recovered from the influence of the anæsthetic, milk-punch was administered, and a generous diet prescribed throughout the subsequent treatment of the case. The local dressings consisted of simple water applications, with an occasional stimulating lotion when the granulations indicated any degree of indolent action. A watchful eye was kept over his power of assimilative digestion, and the measure of nourishment proportioned to its highest capacity, but never exceeded if possible. From the day of the operation until the wound was completely healed not a single untoward symptom was developed; neither pain nor other unpleasant sensation indicating the presence of the bullet, which undoubtedly yet remains buried up somewhere in the tissues beneath the scapula. On the first day of March the wound was completely healed, and the patient was able to dress and feed himself without inconvenience. He has now remarkably good use of the limb, being able to flex and extend the arm rapidly and freely, to place his hand upon his head or on the opposite shoulder, and indeed, with the exception of the direct action of the deltoid in elevating the arm (which is somewhat impaired) he can perform almost all the motions of a sound limb. The history of this case, we think, suggests several important considerations; one of which is, the propriety of not pursuing a leaden ball when it has passed beyond the reach of the ordinary means of extraction, unless its presence involves dangerous consequences, either immediate or remote, to the patient; another of which is, the importance of preserving, if possible, the tendons of the biceps and coraco-brachialis. This man was kept as short a time as possible under the influence of the anæsthetic, and came out of it nicely. Do we not in military surgery frequently keep our patients too long under the influence of this agent, and thereby greatly increase the risk of a speedy rally from the shock of the operation; especially in cases of secondary operations, where the vital energies are already so exhausted as often to make it a serious question whether to operate or not? We think we have seen the ill effects of prolonged anæsthesia under these circumstances more than once or twice. If an over-dose of opium or morphine, or an excess in alcoholic drinks, be frequently attended with great depression and disturbance of the vital force many hours after being taken, can we reasonably expect so potent an agent to be administered and continued long after the conscious soul has ceased to appreciate suffering, without serious subsequent disturbance ensuing? We think we should not, and should therefore make it a point not to protract the stage of anæsthesia beyond the most indispensably necessary time. We should, at least, do all our *pow-wowing* over our patient before we plunge him into the Lethean stream.

Carver U.S. Hospital, Washington, D.C.

MEDICAL DEPARTMENT OF LIND UNIVERSITY.—The number of matriculants during the past term was 81, and the number of graduates 17.

Reports of Hospitals.

JARVIS U. S. ARMY GENERAL HOSPITAL.

I.—COMPOUND COMMINUTED FRACTURE OF THE THIGH. II.—COMPOUND COMMINUTED FRACTURE OF THE ARM. III.—OSTEO-SARCOMA OF SCAPULA.

BY DEWITT C. PETERS, ASS. SURG., U.S.A.,
SURGEON IN CHARGE.

I.—*Compound Comminuted Fracture of the Thigh, caused by a Musket Ball.*—Private John E. Mock, aged 21 years, belonging to the 125th Regiment Penn. Vols., was wounded at the battle of Antietam, Sept. 17, 1862. The musket ball struck the outer side of the right thigh, passed on, fractured and comminuted the right femur, and finally lodged in the opposite nates, whence it was extracted some days subsequently by a pair of ball forceps. The fracture of the femur was at about the junction of the middle and upper thirds of the bone. The patient states that the amount of hæmorrhage was but small, and that the shock to his constitution was slight; he at first only experienced a sharp stinging pain in the right thigh. It was late in the day when he was wounded, and after the firing had slackened, and he was then so near the enemy's lines that he was not carried off the field that night, but was obliged to remain unattended close to the rebel pickets until the following morning. In proof of his condition he states he would have slept had not the cries of other wounded men troubled him. On being carried to the rear simple dressings were applied to the wounded thigh, and he was then sent in an ambulance to the General Hospital at Frederick city. The transportation on a rough road irritated the parts exceedingly, causing very active inflammation to supervene and threaten extensive sloughing. The surgeons in attendance, he says, at the General Hospital consulted on the propriety of amputating, but decided adversely, as they considered the time for a primary operation had already passed, and his chances therefore for life were better with the limb left as it was found. The suppuration that followed is described as being copious, yet laudable in color and consistency. It was nearly one month before the fracture could be adjusted, owing to inflammation and suppuration, and this was then accomplished by letting the limb rest in a long, straight, and grooved tin splint, which had previously been protected by cotton batting. The anterior surface of the limb was incased in plaster of Paris, which on becoming hardened answered as a coaptative splint extension, but no counter-extension was made, for the latter tended to interrupt free circulation, and cause loss of vitality in those parts located below where it could be made. The wound caused by the exit of the ball, as it passed out of the thigh, and also the one made by its lodgment (after its removal), healed kindly, and rendered no further annoyance. At the end of three months from the time when the injury was received, the tin splint and incasement were taken off, and it was found that the fragments had united firmly, and he was accordingly allowed to commence to move on crutches. The patient bears the scar of an extensive bed-sore over the locality of the sacrum, which he says occurred while he was confined to his bed, and he also further informs me that he suffered during this treatment with a severe attack of rubeola. He was transferred to this hospital March 7, 1863, and on examination it was found a fistulous opening existed in the locality of the external track of the ball, which on probing revealed the presence of necrosed bone. The callus appears unusually thick, and from its superabundance gives the thigh a slightly bowing appearance, more than in reality exists. By accurate measurement of the limb, and comparing it with the length of its fellow, it is ascertained that the shortening amounts to three and a half inches. Since his admission into this hospital the general health of the patient has improved rapidly, and he is now

able to walk about freely unaided even by a cane. Two or three small pieces of bone have been removed as they became detached, and his case bids fair to be most happy in its results.

While our troops were marching on to take possession of Pensacola, Fla., I saw in consultation a soldier who was wounded in almost the same locality as was the above case. The femur was fractured and comminuted, while the vessels and nerves of any size escaped injury. Amputation was urged by two surgeons, but it was earnestly opposed by me on the ground that the man was in robust health, had youth in his favor, and near at hand we had a most excellent hospital. The trial was made to save the limb, and under the skilful attention of his regimental surgeon the man recovered with a useful limb in the course of four months' time. My experience in the treatment of compound fractures of the thigh caused by gunshot wounds, and by other kinds of violence, has inclined me (especially in certain of these cases) to favor the most conservative course of action. In cases where the large and important blood-vessels and nerves have escaped injury, and there is not any extensive laceration and destruction of the soft parts, when the constitutional symptoms are not alarming, the true indications are, it appears to me, to try and save the limb. Instances where by accident or by chance the surgeon has not seen the case in time to perform primary amputation, and has left nature to her own powerful efforts, which have been finally crowned with success, are not by any means unfrequent, and these instructive cases should not, in my judgment, be overlooked in forming our opinions in deciding whether a limb should be sacrificed or not.

II.—*Compound Comminuted Fracture of the Right Os Brachii, caused by a Musket Ball.*—Private George W. Krohn, aged 19 years, belonging to the 3d Wisconsin Regiment Volunteers, was transferred to this hospital March 7, 1863, from Frederick, Md.

The patient states he received his wound at the battle of Antietam, Sept. 17, 1862. A musket ball struck him on the inner surface of the right arm, about three inches below the shoulder-joint, very near the usual course of the brachial artery and vessels. The ball passed downwards and backwards, and made its exit posteriorly. In its transit it fractured and badly comminuted the os brachii of that side. In his own expressive language the soldier says "the arm dangled by his side like a whip-lash, after it was wounded." The hæmorrhage was very insignificant, and has not since occurred. From the battle-field the patient was sent with others to a General Hospital, where the surgeon in attendance placed the arm in a grooved tin splint, and applied soothing applications. The injury was followed by acute inflammation in the adjacent soft parts; pus formed and burrowed, requiring counter-openings to be made for its relief. In this manner he was subjected to treatment for a number of weeks until the suppuration ceased and the wounds closed, when the ordinary coaptation splints were applied. He states that his surgeon said the union of the fracture was slow. During the healing process several small fragments of comminuted bone came away. On his admission into this hospital it was found that the bones had firmly united, and the callus was extensive. The muscles of the arm were cemented together at the point of injury, and the motions of the limbs by this cause impeded. He was directed to use the shower-bath freely to the parts, and apply stimulating embrocations. Passive motion was also employed, and under this treatment he finally gained a useful arm, but being thus incapacitated from further military duty he has been discharged.

III.—*A Case of Osteo-Sarcoma involving the entire right Scapula.*—Private G. W. Trombough, aged 28 years, of the 107th Regiment Volunteers, states that in October, 1862, he began to feel pain and symptoms of irritation in the right shoulder. The pain was intermittent, and lancinating in character, and located in the region of the scapula. He was then on active duty in the field. In the course of a few days he noticed that the parts began to enlarge, and it was then that he presented himself to his regimental surgeon, who treated the case lightly, applied a blister on the tumor, and said the man would be all right in a day or so. Gradually since that time the tumor has gone on increasing in size, and is now quite formidable; it involves the entire scapula, and is to be detected filling the subscapular space as well as externally. The proportions of the tumor are regular, but they are more prominent in its lower section than above. The natural motions of the shoulder-joint are seriously interfered with, and this difficulty is slowly increasing. The adjacent glands of the axilla are not yet complicated, nor are there any discoverable symptoms of the inroads of the disease elsewhere. He states, however, he has been threatened several times with a superficial ulcer of the left lower lid near its inner canthus, which from his description I judge to be a predisposition to epithelial cancer. On the advent of the large swelling the predisposition to the latter has disappeared. The man stands five feet and nine inches in his stocking feet, weighs one hundred and seventy pounds, and is, with the exception of the tumor, in apparent robust health. He further states that his mother died while he was a child, with an extensive cancer of the right breast, and in my opinion he is now suffering from the same affection. Her disease was probably scirrhous, while he is taking on the encephaloid form. Acting on the theory of the tumor being malignant in nature the patient has been taking since his transfer into this hospital (which event happened March 7, 1862) the tinct. thujæ in ℥j. doses three times a day, but without any beneficial results, as the tumor is insidiously increasing, and it appears to me that the case is hopeless.

Remarks.—In the pathological museum of the New York Hospital there is a plaster cast of a remarkable case of this kind. The tumor is represented as being very extensive, and finally, I believe, terminated the patient's life. In the same hospital Dr. Gurdon Buck had a similar case to the one here reported by me, which went on increasing to a formidable extent, and the patient was finally discharged incurable. The tincture formed from the leaves of Thuja occidentalis was first extensively employed by the late Dr. Wallace, of New York, in treating malignant disease of the eye and lids. My friend, Dr. James R. Leaming, of the same city, has had remarkable success with the remedy in treating epithelial cancers, and in one case, when the disease was located in the palmar surface of the hand, which was examined by several eminent surgeons, and his diagnosis verified, he succeeded in entirely eradicating the disease.

Reports of Societies.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

STATED MEETING, Feb. 26, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by DR. GEO. H. DARE, Acting Asst. Surg., U.S.A., Secretary.]

DISCUSSION ON TETANUS.

(*Concluded from page* 223.)

ASSIST. SURG. HUNT, U.S.A., remarked that tetanus was the only nervous disease which ever assumed an epidemic form. He stated that in a section of country on the shore of Long Island tetanus was endemic. This was attributed by the people to the common use of fish as manure on the land.

Dr. Hunt made some remarks upon the different physiological effects of opium and belladonna upon the spinal cord. He objected, on theoretical grounds, to the use of opium in tetanus, and recommended belladonna and the cold douche.

E. G. Waters, Act. Assist. Surg., U.S.A., reported two cases of traumatic tetanus. In the first case the symptoms were well marked, including opisthotonos and emprosthotonos. He was treated by Dr. Stevenson of New York city, and recovered. In the second case five or six days after the receipt of the injury trismus appeared, afterwards the thoracic and abdominal muscles became affected; there were well marked opisthotonos and emprosthotonos.

The boy was treated with spt. turpentine, ℥j. every three or four hours, and the same remedy applied externally to the spine, neck, and scapula. The boy recovered from the tetanus; for the spasms subsided and disappeared under the above treatment, and he remained entirely free from them for three days. He had expressed a great desire for buttermilk, and was allowed to have it in small quantities, but proper attention not being paid to him he drank an enormous quantity, about half a gallon. Emesis came on, which proved uncontrollable by remedies, and he sank from exhaustion produced by vomiting.

Dr. Waters remarked that if the affection of the stomach was considered as resulting from metastasis, it was no less remarkable than a cure.

The cognate disease, poisoning by strychnia, having been alluded to, Dr. Waters narrated the case of his own child three weeks old.

Its mother had been taking ext. nux vomica in half grain doses in combination to relieve constipation; in this it did not succeed. After the mother had taken three grains in all the child was attacked with laryngismus stridulus; the spasms also affected the muscles of the face, neck, jaws, and trunk, with marked remissions.

Camphor was used very freely externally and internally. Within twelve hours the spasms were subdued.

Doctor W. remarked that it was evidently not a case of trismus neonatorum: the child was too old, the spasms too extensive and violent, and the general condition too good. There was no trouble about the child's head.

Surg. Bliss, U.S.V., spoke briefly of several fatal cases of traumatic tetanus which had occurred under his observation. He said that the theoretical indication was to put the nervous system as far as possible asleep to external impression, by means of sedatives, such as belladonna, chloroform, etc., until some beneficial change took place in the wound.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXXIV.

By PROF. CHARLES A. LEE.

FLORENCE.

October 31, 1862.

The principal hospital of Florence was founded as far back as 1286, by the father of Dante's Beatrice. It covers a large area of ground, though it has but one court of any great size. It numbers over one thousand beds. In consequence of the fashion to bequeathe property to hospitals it became very rich, but in the last century the government seized upon all its possessions, and has since administered them. It contains wards for males and females, divided, as usual, into medical and surgical; a syphilitic ward, one for contagious disorders, one for ophthalmic diseases, a lying-in ward, *one for the delirious in fever*, and one for cutaneous affections. It also receives children, who, as in most Italian hospitals, are scattered around among the other patients.

The main portion of the building is in the form of a cross, the longest section being divided longitudinally into three long wards by partition walls. Of course none of them can be well lighted or ventilated. The air can only be admitted on one side, and that in limited quantity. The wards forming the transepts labor under the same inconvenience. The lying-in ward has two small windows at one end of the room, otherwise it has no means whatever for the admission of either light or air. The upper wards are still worse, and those appropriated to syphilitic and ophthalmic cases are unfit for any human beings to stay in for any length of time. I am indebted to the kindness of Dr. Gloig, one of the attending physicians, for showing me over the entire establishment, and explaining everything connected with its management. It seems that no statistical reports of admissions, diseases, deaths, etc., have ever been published; one reason assigned was, that the doctors could not agree as to the names of the diseases. In regard to the ratio of mortality, it was stated that the number of deaths averaged about two daily. During some seasons of the year the number of patients reaches as high as two thousand. At present it is considered a healthy season. There is one small ward for pay patients, at present containing about a dozen, who pay two and a half francs each per day. The ventilation, however, like every other part of the buildings, is very imperfect, and all the surroundings disagreeable; very different from what I found at Berlin, Vienna, and Venice. All the wards were too crowded, the beds being within four feet of each other, and the rooms quite narrow. The whole establishment was pervaded by a strong, disagreeable hospital smell, and the upper wards were so close and stifling that I was very glad to escape from them as soon as possible. The floors, also, did not present that degree of cleanliness that ought always to be found in such institutions; they were of brick, which does not show dirt quite as readily as polished deal or marble. In Venice all the floors of the hospital buildings were of hard, polished breccia composition, as hard and smooth and even handsomer than marble; a most admirable plan, and one which we might introduce with advantage into our own country. The nursing in this *Spedale di Santa Maria Nuova* is done by females who belong to an order of nuns who devote themselves to such works of charity and mercy. The *Sisters of Charity* are regarded here with suspicion, and are not employed in the hospitals in any capacity, under the impression, perhaps suspicion merely, that they belong to the order of Jesuits, who are now regarded with disfavor all over Tuscany at least.

In regard to the treatment of *fevers* in this establishment, I was told by Dr. G. that very little medicine was used in those of the typhus and typhoid classes, the main dependence being placed on suitable diet. In the malarious diseases, *quinine* is used freely—in ordinary cases to the extent of sixty centigrammes three times a day, and in those of a pernicious class, as much as four grammes were given at a single dose, and repeated according to circumstances. Bleeding, he stated, was rarely resorted to in this hospital for any disease. Patients would often come in the spring of the year and insist on being bled, in accordance with the old superstition, and in such cases he generally indulged them in their whim. The small-pox ward has been unusually full during the last year, the disease having prevailed extensively in an epidemic form, attacking almost indiscriminately those who had been vaccinated and those who had not. The scarlet fever also has been extremely rife and fatal in this city during the last year, although there had been but few cases of it during several preceding years. The croup is also a very common disease here, and is treated usually with emetics and blistering; zinc is a favorite emetic, but the physicians have no faith in tracheotomy, and it is very rarely if ever resorted to. The surgery of the hospital, I should judge, from what I could learn, is of a highly respectable order. The surgical *armamentarium* is certainly most formidable, and presents an array of instruments, ancient and modern, which ought to satisfy the most bloodthirsty aspirant for chirurgical honors; and I will remark, by the way, that Italian surgical instrument makers will not suffer by comparison with those of the English, French, or any other nation.

In regard to the dietary of the hospital, there are three grades or degrees. The *first* consists of four potages, or soups, with an allowance of coffee, and some meat. The *second* of two potages, bread, and a little chicken. The

third of chicken, boiled or roast beef or mutton, bread, etc. The allowance for the last, or what is considered full diet, is one pound of meat, one and a half of bread, and half a pint of wine. This is considered a very generous allowance, "for," says Dr. G., "at Naples, they keep their patients for days and days together on nothing but oranges!" There are eight principal surgeons belonging to the establishment, and ten internes who have not completed their studies. There are also ten principal physicians, and four assistant physicians who have completed their studies, but who wish to improve themselves in practice. They do not reside in the building, but alternately spend the whole day in the wards. There is an infirmary also for out-door male patients, and one for out-door female patients, and two physicians connected with each. This hospital has long been the great school of practical medicine for Florence, if not for Tuscany generally, and has produced some of the most eminent physicians, surgeons, and anatomists of Italy. It is not a completely organized medical school, nor has it the power of conferring academical degrees; but it is simply a *practical school*, where medicine, surgery, and midwifery are clinically taught. The Medical University is at Pisa, where students have to pursue their studies for five years, when they receive a diploma; but this does not entitle them to practice until they have pursued their studies two years longer at this school in Florence, when they receive a certificate to that effect which authorizes them to commence practice.

There is an extensive anatomical and pathological museum connected with this hospital, which is said to be one of the most valuable in Italy. It is, however, in my judgment, very far inferior to that at Bologna, which may well rank among the first in the world. Still this is a most valuable collection, illustrating every department of pathology by wet and dry specimens, carefully prepared and well preserved, and also beautiful wax preparations, illustrating every form of external and internal disease. The anatomical preparations are chiefly intended to illustrate regional anatomy, while descriptive anatomy is more especially taught at Pisa. There is no school, perhaps, in Europe where pathological anatomy is more thoroughly and successfully taught than here.

In the museum of this school, also, are the celebrated preparations of Legato, who died about thirty years ago. This celebrated anatomist discovered a mode of changing all animal tissues into stone without changing their form or color in the slightest degree, and even preserving the natural flexibility of the ligaments, tendons, and joints, etc. Here is a tablet, perhaps a foot and a half square, inlaid with splendid mosaics in ornamental figures, consisting entirely of the various textures of the body converted into stone, hard and smooth as polished marble. For example, a portion of liver, lung, spleen, skin, kidney, penis, uterus, cartilage, muscle, brain, nerve, spinal cord, membrane, eye, bone, etc., etc., all retaining their natural color, and readily recognised by the anatomist. This celebrated genius did not meet with that encouragement which he expected and deserved for his most important discovery, the government entirely ignoring his valuable services, and the secret accordingly perished with him. Among the animals converted into stone I noticed the rat, cat, spider, fishes, etc., all looking perfectly natural. In connexion with museums of anatomy and pathology I cannot pass by in silence that most magnificent collection in the Pitti Palace, which goes under the name of the *Museo di Storia Naturale*. Commencing with the Grand Ducal Medicis, several of whom were great patrons of the natural sciences, it has been gradually enlarged by succeeding dukes and princes, and by naturalists, in every department, until it stands almost unrivalled among similar collections in Europe. Although the collections in natural history are worthy of all praise, both for their extent, admirable arrangement, and perfect preservation, yet the wax models illustrating the anatomy of the human body are entirely unsurpassed in point of beauty, accuracy, and truth, by any preparations of the kind hitherto attempted. It is perfectly safe to say that no such collection is known to exist, and that it is next to impossible that any should surpass it. The most ancient were executed by Zummo, a Sicilian, and represent the human body in various stages of decomposition. These, however, are few and comparatively unimportant. The greater portion represent healthy human anatomy, the bony structure, the ligaments, muscles, nerves, brain, membranes, organs of sense, viscera, organs of generation (male and female), pregnancy in all its stages, the placenta, uterus after delivery, fœtal circulation, absorbents and lymphatics, lacteals, heart, etc., etc. The entire series, illustrating the phenomena of utero-gestation, are especially admirable. Comparative anatomy is also extensively illustrated; especially the structure of the torpedo, the anatomy of the silkworm, the leech and cuttle-fish, the cat, dog, sheep, calf, turtle, fish, the common fowl, the hen's egg, etc., etc.

There are also wax models of vegetable anatomy, illustrative of the minute structure of plants; these were principally prepared under the direction of the celebrated Amici. The magnified representations of the microscopic parasites which produce or accompany the disease of the vine (*oinium*) are also very interesting. The entire collection is an honor to Florence and to Italy itself.

Attached to this Museum is the Temple erected by the last Grand Duke to Galileo, and inaugurated upon the occasion of the meeting of the Italian Association for the Advancement of Science in 1840. In the centre is a statue of the Tuscan Philosopher, surrounded by niches in which are placed busts of his principal pupils, and with presses containing the instruments with which he made his discoveries, including the telescope with which he discovered the satellites of Jupiter, etc. Under a glass cover is preserved one of the fingers of Galileo, which was abstracted by Gori when his remains were removed from their first resting-place to the tomb erected in the Church of Santa Croce. The walls are beautifully inlaid with marble and jasper; the ceiling is richly painted in compartments, representing the principal events of the life of Galileo, and all the talent of Tuscany has been employed to render this temple worthy of the object for which it was intended. It is said to have cost nearly $200,000, not including the price of the manuscripts of Galileo and his pupils, which the Grand Duke had collected irrespective of cost, and which are preserved in the library in the Pitti Palace. Attached to the museum is a botanical garden, rich in rare and exotic plants.

Action of Quinine.—That quinine is a tonic I have long had reason to doubt. Quantities of this valuable drug appear to me to be annually wasted in administering it in all sorts of affections as a simple means of increasing appetite or communicating strength. I consider it a vegetable alkaloid, which, like others of its class, operates on special parts of the nervous system through the bloodvessels. Why it does so we are ignorant. That vegetable poisons do possess this influence constitutes an ultimate fact in the science of therapeutics. But in a similar manner to that in which opium operates on the brain, strychnine and hemlock on the spinal cord, and other drugs operate on other parts of the nervous system, so, I believe, quinine acts on the ganglionic system of nerves, controlling and diminishing those phenomena of fever which physiology has proved to be produced by their irritation or injury.—(*J. Hughes Bennett*) *Lancet.*

The report of the death of Dr. Geo. Suckley, Medical Director of the Eleventh Army Corps, is incorrect; Dr. S. remained with the wounded, and is a prisoner.

Dr. R. J. Levis has retired from the editorship and proprietorship of the Philadelphia *Reporter*, and entered the army as a Surgeon of Volunteers.

American Medical Times.

SATURDAY, MAY 16, 1863.

A CITY OF NUISANCES.

New York City received its usual New Year's congratulations from the Mayor and its numerous Health Authorities on its excellent sanitary condition. The Mayor discoursed pleasantly, and in the most mellifluous phrases, on the efficiency of the different health organizations, and especially of the Commissioners of Health, over which he himself presided. Nor did he fail to remind our citizens of the grievous infliction which the city had escaped, through his efforts, in the defeat of the Metropolitan Health Bill the year before, by means of which all these efficient health organizations, now costing half a million annually, would have been displaced. The City Inspector took up the subject in the same pleasing strain, and in his annual report informed the Common Council that New York was the healthiest city in the world, and that London and Paris could not compare with it in sanitary regulations and in the state of the public health. The City Fathers received these official reports with all due gratitude, but simple-minded citizens fell to wondering what must be the condition of the unfortunate European cities which were in a more unfavorable sanitary state than New York.

The season of congratulation passed, and the earnest work of the year commenced. Our health authorities, having defeated every measure of legislative reform, relapsed into their usual idleness. The city has been allowed to take care of itself, and now presents a spectacle of accumulated nuisances which excites the shame of even the Mayor and the City Inspector, and which is beginning to tell, according to the latter, with fatal effect upon the health of the inhabitants. In a late communication he says:—

"Since my last communication of the 26th of March there has been no improvement in the cleaning of the streets, but on the contrary the city, at this moment, is in a more filthy condition than has heretofore been the case at this season of the year, notwithstanding the favorable condition of the weather for street-cleaning purposes. As an evidence of the effect of this state of things upon the health of the community, I would state that the mortality of the city from the first of March has been largely on the increase, until it has now reached a point of fearful magnitude. For the week ending April 27, there were reported to this Department one hundred and forty more deaths than occurred during the same week of the previous year. Were this increase of mortality the result of an existing pestilence or epidemic among us, the public mind would become justly alarmed as to the future; but although no actual pestilence, as such, exists, it is by no means certain that we are not preparing the way for some fatal scourge by the no longer to be endured filthy condition of our city."

It is doubtful if there is a city in the civilized world that contains within its jurisdiction as many sources of that class of diseases known as preventible, or capable of being removed and destroyed, as New York. They are thickly strewn in every street, in every lane, and even in every dwelling and shop. Many of these sources of public and private pestilence are brought to light in the recent report of Capt. Lord of the Sanitary Company of the Police, and others are apparent to any careful observer. As we are rapidly ripening, in the opinion of the City Inspector, for a spontaneous epidemic, it will not be unprofitable to point out some of the more common sources of diseases which are allowed to exist in our midst. In this review we shall notice only those causes of disease which are capable of being removed by an efficient Board of Health.

In regard to tenement houses, the report referred to contains the following frightful summary:—

"The total number of tenement houses is given at 12,374, with a population of 401,376, of whom 22,095 live in cellars—a subterraneous population large enough for a small city in itself. A little more than two-thirds of the houses, namely, 8,546, with a population of 253,901, are provided with good means of escape in case of fire, while 3,801 houses, inhabited by 125,380 persons, are deficient in this respect. The ventilation of 8,126 houses, containing 238,113 persons, is reported as good, and 4,221 houses, containing 141,168 persons, are badly ventilated. The following is an exhibit of the number of cubic feet to each person:

	No. of Houses.	Population.
Having from 100 to 300	1,909	62,988
Having from 300 to 400	3,031	102,848
Having from 400 to 500	2,560	78,751
Having from 500 to 600	1,661	48,342
Having from 600 to 700	1,100	31,752
Having from 700 to 800	798	22,281
Having from 800 to 1,000	1,288	32,809
Total	12,347	379,281

Of slaughter-houses we have the following exhibit:—The number of slaughter-houses in the city is 187, of which 40 are reported as in bad condition. The number of beeves slaughtered per week is given as 2,555; of small stock, 9,362; of swine, 13,205; total per week, 25,222; grand total per year, 1,311,544. Akin to slaughter-houses are those sinks of putridity, fat-boiling establishments, of which there are no less than eighty in New York. These establishments are frequently indicted as nuisances, and are generally located in densely populated districts; but against neither can our health officials be induced to proceed.

Uncleaned streets, courts, and alleys, are the most apparent sources of disease during the summer months. It would be considered an exaggeration by one familiar with the condition of New York, if we were to state that our streets were never before in such a horribly filthy condition. And yet it is susceptible of demonstration by actual measurement that the refuse matter of dwellings, garbage, etc., which fills the streets in the districts inhabited by the poor, is deeper by several inches than at any former period. Many streets are actually shunned by carmen on account of their impassability by loaded carts. The material which has been allowed to accumulate in the streets is of the most putrescible character. Little attention is now paid to garbage boxes, but all the refuse of the dwellings is thrown promiscuously into the streets, from which it is apparently never to be removed. Here it lies the hot summer through, sending forth its disease-generating emanations which fill with disgusting odors all the air, and permeate every habitable recess.

To this summary should be added neglected overflowing sinks, vacant lots strewed with dead animals, obstructed sewers, dumping grounds in the vicinity of populous neighborhoods, etc., etc. And these sources of disease are only those which may be noticed by the most casual observer. What numberless and unsuspected causes of sickness would not a thorough investigation by a competent Commission

reveal? How many districts inhabited by the wealthy would be found in an unhealthy condition, and perhaps underlaid with the rapidly developing germs of endemic diseases? How many palatial residences, not even excepting those bearing the insignia of the mayoralty, would be proven to harbor the secret causes of family decay and early death?

No philanthropic person can contemplate the picture which we have feebly drawn, and reflect upon the terrible evils which are visited upon this community, seen and unseen, recognised and unrecognised, without a feeling of the keenest sorrow. And how much will that sorrow be increased when he is reminded that all these evils are susceptible of removal, but that the measures to be employed are always to be thwarted by those who gain wealth and power by their perpetuation! Health reform seems, indeed, to be impossible in New York. It will never be urged as a political measure, and thus combine powerful party influences. It is brought forward by those who are influenced only by motives of benevolence, and is opposed by partisans who are grasping power. Over a venial legislature the opponents of reform will, we fear, ever prevail.

THE WEEK.

In alluding to the case of trephining in fracture of the spine by Dr. Potter in a recent number of the Medical Times, Dr. Brown-Séquard strongly advocates the operation. He says:—

"It seems to me that in my work I have given reasons enough to show, and facts enough to prove, 1st, that the laying bare of the spinal cord is not a dangerous operation; 2d, that death after a fracture of the spine being usually due to the effects of a pressure upon, or of some irritation of, the spinal cord, it is of the utmost importance to remove the pressure and to diminish the causes of irritation; 3d, that reunion may take place after a wound of the spinal cord; 4th, that the removed parts of the spine may be replaced by new bone; 5th, that no patient seems to have derived any harm from the operation, and that a great many have derived from it either a temporary or a permanent benefit. * * * * I will only say one more word: Here is an operation recommended by men who are not physicians or vivisectionists like me, but surgeons of the greatest eminence, such as Louis, Henry Cline, Tyrrell, Chelius, Mr. J. E. South, Sir Astley Cooper, and many others—an operation which has been often performed, with a temporary or a permanent success, but which is, however, neglected by most surgeons and proscribed by some, who criticize it theoretically. Is it not a sad spectacle that there is such a neglect and such a criticism when so much is at stake as the life of many men every year? Sir Astley Cooper said, 'The operation is laudable and not severe; nor does it increase the danger of the patient. If we could but save one life in a hundred we would deserve well of mankind.' To this I will only add, that the proportion of lives saved is now, not 'one in a hundred,' but from twenty to twenty-five in a hundred."

The opinions of this eminent writer deserve the most serious consideration of surgeons.

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We commence this week the publication of a short series of lectures on the Diseases of the Respiratory Organs in Children, by the late Dr. C. Van Alen Anderson. Dr. Anderson was an alumnus of the College of Physicians and Surgeons, and prepared these lectures for the Spring Session of 1862 in that Institution. The rapid progress of the disease of which he died prevented their delivery. Dr. Anderson made the diseases of children his special study both in Europe and in this city, where he was for three years physician in that department at the Demilt Dispensary. His lectures are marked by extensive research and mature judgment, while the admirable style in which they are written will commend them to general perusal, and increase the number of those who lament the early death of one who gave promise of so useful and brilliant a career.

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The Medical Board of Bellevue Hospital have recommended the opening of wards for the following specialties in that Institution, viz. Diseases of the Eye and Ear, Skin, Nervous System, and Orthopœdia. The appointments of physicians and surgeons, two for each division, for these several places, have not been made.

Reviews.

A Practical Handbook of Medical Chemistry. By John E. Bowman, F.G.S. Edited by Charles L. Bloxam. Third American from the fourth and revised London edition, with Illustrations. Philadelphia: Blanchard & Lea, 1863. pp. 351.

This work is a most convenient treatise on Chemistry applied to medicine. It enables the student and practitioner to apply all the various tests in the study of the urine, blood, mucus, etc., and with accuracy. This edition is fully up to the present state of medico-chemical knowledge.

On Diseases of the Skin. By Erasmus Wilson, F.R.S. Fifth American from the fifth and revised London edition. With plates and illustrations on wood. Philadelphia: Blanchard & Lea, 1863. Pp. 694.

The present American edition of this work has the plates bound in the same volume with the text. The edition has been carefully revised by the author, and presents the most recent views of the pathology and treatment of skin diseases. We cordially recommend the work to the profession.

Correspondence.

HOSPITALS FOR OPERATIONS.

[To the Editor of the American Medical Times.]

Sir:—The above is the heading of an article in the Medical Times of April 18, 1863, signed P . . . ., from which I take the following extract:—"In our General Hospitals, as at present arranged, the Medical Staff is too small to be in condition, as to time (to say nothing of skill, etc.) to perform all the operations that should be performed."

The sweeping charge of incompetence as applied to the Army Medical Corps is not only unprofessional and ungenerous but it is unjust; yes, more, it is false.

If P. . . . does not wholly disregard truth, and will refer to the Army Register, he will withdraw that part of his article which intimates that the Medical Corps of the army is not skilful, for it embraces many of the leading (formerly civil) surgeons in our country.

To the excellent surgeons whose names appear in the article referred to this untimely puff is unnecessary, and perhaps unacceptable—while to the Medical Corps the insinuation of incompetence is an offensive and uncalled for

slander, that, I trust, will call forth proper treatment from the Medical Corps of the Army.

Yours, etc.,

SURG. VOLS.

ST. LOUIS, Mo., May 4, 1863.

BROMINE IN ERYSIPELAS.

LETTER FROM B. WOODWARD, M.D., TO M. GOLDSMITH, SURG. VOLS. AND MED. DIR.

PARK BARRACKS, LOUISVILLE, KY., Feb. 26, 1863.

DR. GOLDSMITH,
Act. Med. Director,

DEAR SIR:—The very lively interest which is evinced by gentlemen from abroad in your great "idea," "the Action and Influence of Bromine," induces me again to offer the results of the experiments which, under your orders, I have been enabled to make.

Of its results, so far as its prophylactic action against erysipelas is concerned, you are well aware; and yet it may not be amiss to state that, since its use in vapor in the crowded wards of these barracks, and from which, before its use, we got from five to eight cases of erysipelas per week, not one case has originated in them, and all the cases which have appeared have come from the crowded Sibley tents.

In the hospital wards, where we have had as many as sixteen cases at a time, side by side with other sick and wounded men, there has not been an instance of its spreading among them. So well is its power established to prevent the spread of erysipelas that even the ward-masters and nurses, who used to dread the effects of being in the wards with erysipelas patients, no longer fear it in the least, for they see there is perfect immunity from danger.

As you are aware, sir, I have considered erysipelas, diphtheria, pyæmia, and hospital gangrene, as one and the same disease, having local manifestations. Acting on this theory I was early led to the use of bromine, both locally and constitutionally, in diphtheria, after having tested its virtues in erysipelas.

It is generally conceded that diphtheria is infectious, its virus being disseminated in the atmosphere and inhaled as the virus of any other disease is, which has a cell origin; and though we have had a number of bad cases, in which the exudation was well made, and the constitutional disturbance great, in the same wards with the other patients, not a case has originated from the infection. And when they have been brought in from the tents they have been unhesitatingly put in the common wards with others. And for the treatment of the disease no means have been found so effectual as the inhalation of the vapor of bromine, and the exhibition of from half a drop to a drop and a half in glycerine every four, five, or six hours, according to the severity of the case. In one case, in which from the œdema of the fauces and the denseness of the exudation the air-passages were completely occluded, and the man was actually dying from suffocation, after saturated solutions of nitrate of silver and sulphate of copper had failed to give any relief, the direct application of pure bromine by a probang caused the instantaneous separation of the exudation, and it was coughed up in large plates. It was the knowledge of the power of bromine to instantly destroy wet animal tissues that induced me to use it in this case. The whole back of the mouth and fauces were so covered with exudation that little damage was done to the true tissues. It was a hazardous proceeding, and nothing but the urgency of the case could justify it—indeed tracheotomy would have been resorted to, if it had been possible to control the motions of the patient. The inhalation of bromine vapor, and giving it by the mouth in one drop doses in glycerine every five hours, were the only means resorted to in the treatment of the case, and he made a good recovery. Five other cases, well marked, were also treated with bromine in vapor and by the mouth, with the best results. We are now, sir, using bromine in both primary and secondary syphilis, with marked success. In two cases of true Hunterian chancre the effect of its local use has been to soften the hard base and bring on healthy action. In one case of phagedena, where the whole dorsum of the penis was involved, Dr. Keefer, in whose charge the syphilis ward is, has used it in solution, one part to forty of water. It is well borne, and within twelve hours the swelling was arrested, and now, on the fourth day after its exhibition, the whole sore is covered with healthy granulations, and the pus is laudable.

In the treatment of syphilis and diphtheria, and since the use of bromine in the barracks and in hospitals, nineteen or twenty, as a prophylactic, I have the satisfaction to report that *not one death has occurred* from either of those diseases or hospital gangrene. In the Erysipelas Hospital, No. 19, there was a case of gangrene of the mouth and tongue from gunshot at the battle of Stone River. Dr. Curtis, the assist. surgeon, reported that all known means had been exhausted, without any good results. I ordered bromine, both by vapor near him and constitutionally. Although he lay comatose, and the whole head was involved in erysipelas, sloughing of the one cheek and the tongue were going on, and the fetor was intolerable, within twelve hours the sloughing was arrested, the wounds took on healthy action, and on this treatment alone he made a good and rapid recovery.

In hospital gangrene in Nos. 7, 3, and 19, the most remarkable effects of the use of bromine have been seen. Although I cannot with propriety "report" them, I beg leave to state some cases of remarkable interest, which, by the kindness of the surgeons at those hospitals, I have been allowed to see. At Hospital No. 7 there is one case of gunshot wound of the foot in which the gangrene included the whole upper part of the foot from the toes to the talus. The integuments and muscles had all sloughed away, leaving the extensor tendons bare and isolated. The local use of the bromine had arrested the slough, and the line of demarkation was well marked.

Another was at the same hospital of wound of the leg by a piece of a shell; the gastrocnemius and soleus were bared for a space of eight inches by three inches; after the direct application of bromine the "line" was well marked, and the wound took on healthy action.

Another case at the same hospital: the tibia was bared and denuded of periosteum, but the same good results were had from the use of bromine.

At Hospital No. 3 I was shown two cases of gangrene; in one the slough had not only destroyed the muscles of the right arm, but the humeral artery had been sloughed and ligated.

Another, and perhaps the worst case, at the same hospital, where the slough had carried away integument, obliquus externus, and obliquus internus, so that for a space of eight inches by five inches, there was nothing left but the tendons of the obliquus internus, and the peritoneum, the sloughing had been arrested and the whole wound was covered with healthy granulations. In all these cases the peculiar fetor of gangrene had disappeared.

All these cases were mixed in with sick and badly wounded men, and yet there had not been an instance in which others had taken the disease. All these cases were gangrenous when brought from the front to this city, and I cannot find an instance in which it originated here. This, as Dr. Goldsmith, in charge of Hospital No. 7, said, can only be attributed to the prophylactic power of the vapor of bromine in the wards, and, to use his own words, "we are doing with the greatest impunity what, a year ago, we should not have dared to do, viz. putting these cases in the wards with other wounded men."

Bromine has directly stimulant and tonic action, as well as antiseptic. Under its use the volume of pulse is increased, but not its frequency. The skin becomes warm, the secretions from the kidneys increased, and the deposits of the urine are largely increased.

The question is frequently asked: "What is the effect of the vapor of bromine upon intercurrent diseases?" In no case whatever has it had a bad influence, and I am firmly of the opinion that in the asthenic points of disease which we meet in military hospitals it is always of decided advantage. This, I think, arises from the tonicity it gives to the system, as well as its power to destroy morbid cell-matter in the air, which, breathed, necessarily reacts on the sick themselves, or, in other words, it directly purifies the air of morbid matters, while its own vapors arise of themselves tonic and healthy.

To my own mind the results of its use are these: It is a prophylactic to all those diseases which depend upon cell formation for their propagation, and it is one of the best antidotal agents to these diseases of which we have any knowledge.

I have the honor to be, Sir,

Your ob't serv't,

B. Woodward.

Army Medical Intelligence.

ORDERS No. 28.

Lovell General Hospital,
Portsmouth Grove, R. I., May 7, 1863.

In obedience to instructions from Surgeon-General through Medical Director's Office, Department of the East, dated New York, May 6th, 1863, the General Hospital at Portsmouth Grove, R. I., will hereafter be designated the "Lovell General Hospital," in commemoration of the first Surgeon-General of the Army.

By order of the Surgeon in charge,

Wm. F. Cornick,
Asst. Surgeon U.S.A.

Medical News.

M. Desormeaux, Surgeon to the Necker Hospital of Paris, has used for some ten years past a urethroscope which has very nicely answered the purpose, after having been gradually improved and brought nearer to perfection. The *Gazette des Hôpitaux* of the 14th instant, states that strictures have been clearly seen with the instrument, which consists of a tube containing a metallic mirror, pierced in the centre, and placed at an angle of forty-five degrees with the axis of the instrument. The tube ends in a piece which is intended to be connected with the catheters introduced either into the urethra, the nasal fossa, the pharynx, or any deep canal. The opposite end of the tube is connected with a diaphragm pierced in the centre like the mirror. At right angles with this tube, a second one is fixed, in which a gas-lamp is placed. The light of this lamp, reflected by a concave reflector, falls on the slanting mirror, which latter directs it upon the region to be examined. A lens may also be used to cause the rays of light to converge on the object to be viewed. Some nicety is required in the handling of the instrument, and a certain amount of practice is indispensable; but the instrument bids fair to turn out very useful. The catheters are open at the side, to allow of the introduction of sponges, etc.—*London Med. Rev.*

Resignation of Professor Samuel Jackson.—We learn that Professor Jackson, who so long and very ably filled the chair of Physiology in the University of Pennsylvania, intends at once to tender his resignation. Dr. J. was an enthusiastic, highly interesting, and brilliant lecturer, and inspired his hearers to a great extent with his own zeal for physiological investigations. We wish him in his retirement the repose he is so well entitled to, with health, long life, and every comfort—*Med. News.*

M. Legrand relates a curious case which occurred lately in a small town in France. A clerk was accused of robbing his master of some bank notes. He denied the charge, but was arrested. Whilst under charge of the police, he was seized with fever, became delirious, and during his delirium frequently cried out, "I am a robber," etc. On his recovery, he was again interrogated by the magistrate, and indignantly denied the charge. Hereupon the magistrate, puzzled, demanded of the prison-doctor "whether the words of a patient suffering from typhoid fever, and uttered during delirium, could be considered as of any value?" The doctor very wisely declined to give an answer, and consulted M. Legrand, who thereupon drew up an answer to the question, which was to the effect that words so uttered could only be considered as mere indications of guilt. The magistrate accepted this view; and, for want of better proof of guilt, the young man was liberated. —*Brit. Med. Jour.*

Vaccination in the Post-Office.—We understand that Dr. Waller Lewis, the Principal Medical Officer of the Post-office, has, on account of the great prevalence of small-pox in London and the suburbs at the present time, recommended that all the officers who have not taken the disease naturally, or who have not been vaccinated recently, should be advised to get themselves revaccinated; also, that his Lordship the Postmaster-General has sanctioned this recommendation. We are of opinion that this example should be followed in all public and private establishments where large numbers of persons are employed.—*Lancet.*

Philadelphia in 1862.—The city contains upwards of 94,000 dwelling houses. The population, according to the census of 1860, was 568,034. This gives a population of only 6·02 to a dwelling house. Excluding the deaths in the military hospitals the mortality of the city was one in forty-three, or 2·32 per cent. The births during the year were 14,741, being 2,530 less than the preceding year. The marriages were 4,662, being 245 more than during the preceding year.—*Reporter.*

Resident Physicians at the Philadelphia Hospital (Almshouse).—The terms of service of Drs. Wood, Maury, Owens, and Girvin, Senior Resident Physicians in the Philadelphia Hospital, having expired, an election was held by the Board of Guardians of the Poor on the 23d ult., for four junior resident physicians. The election resulted in the choice of Drs. Richard G. Ludlow, J. A. Hagy, Edward Rhodes, and Josiah Reeve.

Five Cases of Gunshot Fracture of the Femur are reported as successfully treated with "Smith's Anterior," by Charles A. McCall, M.D., U.S.A., at the Mount Pleasant U. S. General Hospital, Washington.—*Med. & Surg. Rep.*

Philadelphia School of Anatomy.—The Philadelphia School of Anatomy has passed under the management of Dr. James E. Garretson, who has been attached to the school as demonstrator.—*Med. & Surg. Rep.*

Association of Medical Superintendents of American Institutions for the Insane.—The seventeenth annual meeting of the Association of Medical Superintendents of American Institutions for the Insane will be held at the Metropolitan Hotel, in the city of New York, on Tuesday, May 19th, 1863, at ten A.M.—*Med. & Surg. Rep.*

Sensitive Barometer and Thermometer.—At a recent meeting of the Manchester Literary and Scientific Society, Dr. Joule exhibited a thermometer of remarkably delicate construction. It shows a variation of temperature amounting to no more than a few ten-thousandths of a degree. He has also exhibited a barometer by which he states that he is enabled to observe the effect of a variation in its elevation of "less than one inch."—*Lancet.*

Chicago Medical Society.—At the regular Annual Meeting of the Chicago Medical Society, held April 3d, 1863, the following officers were chosen for the ensuing year:—For President, Gerhard Paoli, M.D.; Vice-President, M. O. Heydock, M.D.; Secretary and Treasurer, E. L. Holmes, M D.

ERRATA.—In the report of a case of Puerperal Tetanus, page 221, in the tenth line from the last, it should read, "there was *now* opisthotonos" instead of "there was *no* opisthonos."

In the Paper on Mummied Heads, by Dr. Merritt, occur these Errata: Part I, Page 195, fifteenth line from bottom, for "which also pass through *to the skin*," read "to the *true* skin." Part II, Page 206 second column, seventeenth line from top, for "composed of twisted wood," read "twisted wool."

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 4th day of May to the 11th day of May, 1863.

Deaths.—Men, 107; women, 98; boys, 111; girls, 106; total, 422. Adults 205; children, 217; males, 218; females, 204; colored, 16. Children born of native parents, 13; foreign, 160.

Among the causes of death we notice:—Apoplexy, 6; infantile convulsions, 27; croup, 10; diphtheria, 13; scarlet fever, 16; typhus and typhoid fevers, 22; consumption, 77; small-pox, 2; measles, 2; dropsy of head, 16; infantile marasmus, 25; cholera infantum, 0; inflammation of brain, 14; of bowels, 12; of lungs, 29; bronchitis, 12; congestion of brain, 0; of lungs, 0; erysipelas, 2; diarrhœa and dysentery, 5. 198 deaths occurred from acute diseases, and 27 from violent causes. 273 were native, and 149 foreign; of whom 87 came from Ireland; 72 died in the City Charities; of whom 15 were in Bellevue Hospital, and 2 died in the Immigrant Institution.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

May 1863	Minimum Temp'ture.	SIX A.M. Temperature.	SIX A.M. Evaporation Below.	SIX A.M. Barometer.	SIX A.M. Wind.	TWO P.M. Temperature.	TWO P.M. Evap. Below.	TWO P.M. Barometer.	TWO P.M. Wind.	TEN P.M. Temperature.	TEN P.M. Evap. Below.	TEN P.M. Barometer.	TEN P.M. Wind.
	°	°				°				°			
3d.	50	50	5	29 99	S.W.	67	8	29 99	S.E.	53	3	29.97	N.E.
4th.	47	48	3	29.89	N.E.	64	3	29.94	S.E.	50	1	29.90	N.E.
5th.	40	44	½	29.89	N.E.	46	2	29.86	N.E.	42	1	29.88	N.E.
6th.	35	40	0	29.87	N.E.	40	0	29.83	N.E.	37	0	29.81	N.E.
7th.	56	38	½	29.95	N.E.	43	3	29.86	W.	40	2	29.91	N.W.
8th.	38	39	2	29 97	N.E.	52	6	29.97	N.E.	49	3	29.97	N.E.
9th.	44	47	4	28.97	N.W.	68	9	29.96	S.	57	4	39.98	S.

REMARKS.—3d, Clear; night cloudy. 4th, Fog A.M., showers afternoon and night. 5th and 6th, N.E. rain storm. 7th, Cloudy; light rain in the middle of the day. 8th, Cloudy A.M., variable P.M. 9th, Clear. Rain for the week three inches and a half.

SPECIAL NOTICES.

NEW YORK ACADEMY OF MEDICINE.—*On Wednesday evening, 20th inst., the Discussion on "Hospital Gangrene" will be introduced by* DR. W. PARKER, *and followed by* DRS. A. C. POST, V. MOTT, *and others.*

NEW YORK ACADEMY OF MEDICINE.—SECTION ON OBSTETRICS AND THE DISEASES OF WOMEN AND CHILDREN.—*A Regular Meeting of the Section will be held at the residence of the Chairman,* DR. S. T. HUBBARD, *No. 47 Ninth Street, on Monday evening, 18th inst., at 8 o'clock precisely. Subject for Discussion: Abortion.*

SECTION OF SURGERY AND SURGICAL PATHOLOGY OF THE NEW YORK ACADEMY OF MEDICINE.—*A Stated Meeting of this Section will be held at the residence of the Chairman,* DR. JAMES R. WOOD, *No. 2 Irving Place, on Friday, May 22d, 1863, at 8 o'clock P.M. The Discussion on the subject of the "Management of Reaction after the Shock of severe Surgical Injuries," will be continued.*

SECTION OF MEDICAL PATHOLOGY AND PRACTICAL MEDICINE OF THE NEW YORK ACADEMY OF MEDICINE.—*The Regular Monthly Meeting of this Section will be held at the house of the Chairman,* DR. H. D. BULKLEY, *No. 42 East 22d street, on Monday next, 18th inst., at 8 o'clock P.M. Reports of select cases by members.*

Dr. J. Foster Jenkins has resumed the Practice of Medicine at Yonkers.
Yonkers, N. Y., May 1st, 1863.

Medical Society of the State of CONNECTICUT.

The *Seventy-first* Annual Convention of the Connecticut Medical Society will be held in Rockville Hall, *Rockville, Tolland County,* May 27th and 28th, 1863. The Meeting will be organized at 11 o'clock A.M., of the 27th.

Trains, by the Hartford, Providence, and Fiskill Railroad, leave Hartford for Rockville, daily, at 6.50 A.M., and at 1.30 and 6.45 P.M. Return trains arrive in Hartford at 8.00 and 11.15 A.M., and at 6.12 P.M., in time, each, for trains to New Haven.

Members of the Society, generally, and Delegates from other States, are cordially invited to be present.

LEONARD J. SANFORD,
Secretary.

AMERICAN MEDICAL ASSOCIATION.

OFFICE MEDICAL EXAMINER, CHICAGO,
February 20, 1863.

The next regular Annual Meeting of the American Medical Association will be held in the City of Chicago, Illinois, on the first Tuesday in June, 1863. Every permanently organized State, County, and Local Medical Society is entitled to send one Delegate for every ten members, and one additional Delegate for a fraction of more than half of that number. Medical Colleges, and Hospitals containing over 100 beds for the sick, are entitled to two Delegates; and all other permanently organized Medical Institutions are entitled to one Delegate each.

The Committee earnestly desire a full attendance from all parts of the country.

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To the Medical Profession.—Dr. I.

PARIGOT, Honorary Professor of the University of Brussels, late Commissioner in Lunacy, and Superintendent of Gheel, has opened an Institution at YONKERS, WESTCH. Co., N. Y., for the cure of mental and nervous diseases. The house is situated in a delightful and retired spot near the Hudson with vast grounds and gardens. The system employed in this new institution (that of *free air and family life*) is based upon the moral and physical liberty of the patients who voluntarily submit to medical treatment.

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